Human Security and the "Double Jump":

A Critical Analysis of Electronic Waste in Ghana

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ABSTRACT

This essay seeks to contribute to the academic discourse on the human security paradigm by bringing to light the term's embedded yet unrecognized "double jump," or the move to accept *any* threat (be it violent or non-violent) as a threat to human security. By investigating the use of the human security paradigm in African security studies broadly, this essay argues that the non-recognition of the double jump has meant that a reliance on the paradigm frequently obscures the intricacies of complex ground-level social processes that, rather than singularly serving to impede humans' well-being, can actually abet them. Corroborated by a case study of electronic waste (or "e-waste") in Ghana, the essay emphasizes that although the second hand electronics trade in the country has indeed had adverse effects on some aspects of humans' well-being, myriad benefits that accompany it are glossed over when the phenomenon is strictly contextualized within a human security framework.

Keywords: Ghana, Africa, electronic waste, human security, "double jump"

Four young boys in the middle of a hard packed mud plot outside of Accra, Ghana stand huddled over a mass of wires reaching up to their knees. One lights a piece of scavenged refrigerator insulation, which he then throws atop the mass. Smoke billowing, the boys strike the flaming pile with sticks until the burning insulation ignites the wires. This the boys will do for the next thirty minutes until the plastic casing has melted away, leaving only the pearl inside the disposable oyster: the copper wires. Once the melted plastic has cooled, the youngest of the boys – eight or nine years of age – will pick through the remnants, gathering every morsel of copper that they can manage, which they will resell for \$2 U.S. per kilogram. The scene described above is a typical one at Ghana's increasingly nefarious Agbobloshie dump, an electronic waste (or "e-waste") repository where old electronics come to die, or more precisely, begin their reincarnation process.

E-wasteⁱⁱ is the remnants of old electronics (computers, televisions, refrigerators, CD players and the like) that are being exported to the developing world both in the forms of donations, but also as a means of cheap disposal. In Ghana, the main locus of e-waste reprocessing is concentrated in the Agbobloshie dump, an approximately 15-acre plot of land outside of the capital city of Accra (Caravanos et al. 2011). Once a thriving wetland, the site's oil stained soils are now littered with remnants of old cars, refrigerators, televisions and any other imaginable electronic waste. One evocatively accurate description of Agbobloshie:

The site [is] scattered with scrap metal, engine parts, computer parts, circuit boards, and tangled wires filled with valuable copper. The weather [is] hot and dry and filled with smoke from the nearby burning of wires, parts of refrigerators used to fuel the fires, and melting plastic from the computer monitor shells. The scrap metal market is bustling with people hauling in parts, trading, selling, dismantling, and burning. In the middle of the site a passer-by will stumble upon a lead smoldering area where hundreds of lead acid car batteries are melted and shaped into lead blocks preparing to be sold and shipped off to other countries. Children play on the soiled ground blackened from oils and fires, while women cook food for the workers. A busy produce market is open next to the scrap metal and e-waste recycling site, the other side lined with a small winding river (Caravanos et al. 2011, 22).

That young boys like those described above are engaged in such activities has led observers to point out the very real dangers posed by the entrance of e-waste, particularly in relation to the environment and public health. E-waste can be thought of as an environmental human security threat because the electronics that are disassembled there contain toxic heavy metals (lead, mercury, nickel, cadmium) and organics (PCBs and brominated flame retardants) that have the potential to create serious environmental problems (Aganam 2010).ⁱⁱⁱ After taking air and soil samples at the site, the U.S.-based Blacksmith Group found that both exhibited higher than average levels of iron, copper, aluminium, lead, and zinc. ^{iv} Closely connected with environmental degradation are e-waste's attendant impacts on public health. ^v The main concerns about e-waste's deleterious bearing on public health in Ghana are workers' exposure to the same heavy metals, which, when inhaled, can lead to kidney damage, respiratory tissue damage, and even lung cancer (Edith Clarke, personal communication, January 2011). ^{vi} Particularly vulnerable are children – such as those described in the opening vignette – whose exposure to even small concentrations of lead can have long-term neurological and behavioral impacts, including delayed development, inattentiveness, irritability, hyperactivity, stunted growth, and brain damage (American Academy of Child and Adolescent Psychology 2004).

To this end, it is not surprising that observers of e-waste's rise are classifying the process a threat to human security. The group Solving the E-Waste Problem (StEP) has used the term "human security" in reference to e-waste (What is e-waste? 2011) and elsewhere, insinuation is rife within the literature that e-waste is a threat to human security. A 2009 report from the UN Office on Drugs and Crime (UNODC) has decried electronic waste as, "posing a serious threat to security and development," while other reports lament the process more broadly by writing, "the dumping of toxic waste poses grave...threats to African people" (Redfern 2010; Bomani 1996). Other organizations, such as the Basel Action Network have made the same point with reports pithily titled "Exporting Harm: The High Tech Trashing of Asia" or Greenpeace's "Poisoning the Poor: Electronic Waste in Ghana" (Much toxic waste 2002; Greenpeace 2008). Thus, when considering a context in which to situate the inflow of e-waste into Africa, the academic inclination to write about it from a human security perspective seems to be a superficially excellent fit. But it is not.

The overarching argument of this work is that the notion of "human security," which should arguably have the most relevance to the African continent, rather, suffers the opposite fate. Instead of serving as useful tool to think about, discuss, and reshape the theory and practice of security on the continent, in many instances it has come to stand as a hollow vernacular placeholder used to decry the negative

impacts *of any* social, political, economic, environmental, military, or religious phenomenon that befalls populations. The gratuitous employment of the notion, enabled by the so-called "double jump" – which will be discussed presently – has led the term to become an umbrella of indiscretion and little more than a weak theoretical context in which to situate the occurrence of any social phenomenon. The most deleterious effect of all of this is that once labelled a human security threat, certain processes – like, as this essay will argue, the entrance of electronic waste into Ghana – come to be regarded as universal negatives when in certain instances they can actually *contribute* to human wellbeing.

This essay is divided into three sections. The first section presents an overview of the human security paradigm in Africa by first addressing its utility and thereafter introducing a critique of its embedded postmodern "double jump" that serves to undergird its problematic employment in African and global contexts today. So delineated, the second section shows how contrary to conventional blanket assumptions that e-waste is an unequivocal threat, various demographics of Ghanaian society actually depend heavily on the second-hand electronics trade to help *ensure* their well-being. The third section, in conclusion, offers a summary of findings and suggests ways forward.

Human Security in Africa and the "Double Jump"

The Human Security Paradigm in Africa: Applications and Critiques

Because the human security paradigm gives priority to the well-being of individuals over states, it is frequently cited in African security studies as an optimal way of thinking about security; indeed, it is the new term *du jour* for many commentators on African affairs. So seemingly useful has the human security paradigm become, that a wide breadth of writings has surfaced in recent years to describe just what might be considered an African human security threat. To this end, Ademola Abass notes that when speaking about human security in Africa:

We are concerned with such dehumanizing conditions as violent conflicts, the pandemic of HIV/AIDS, [the] proliferation of arms and small weapons, endless streams of refugees and internally displaced peoples, forced labour, exponential violence against women, the 'curse' of natural resources, environmental degradation, abject poverty, corruption, the lack of basic health care, terrorism, and the rape of constitutionalism and the rule of law (Abass 2010, 10).

The list does not end there. As referenced in Figure 1, some 31 other phenomena in Africa have been either directly or indirectly labelled as human security threats. With this litany of application possibilities, what then, could the negatives of the human security paradigm in Africa be?

The central critique of the praxis of the human security paradigm in Africa is the very facet that apparently gives it such great utility: namely, its amorphous definition means that in essence, *anything* can be a threat to human security. That the previously elucidated lists comprise more than forty threats to African human security – ranging from bad donor aid to cigarette trafficking – underlines the most trenchant critique levelled against the term by its dissidents: specifically, that the quest to ensure "human security" is one that is so broad, such a catch-all for any societal problem, that thinking about security in these terms is in fact more analytically obfuscatory than revelatory.

This assessment of the human security paradigm is not a new one: critiquing the very fungible nature of the term is a well-worn practice within the human security literature. As Suhrke notes, "as a social construct, the term [human security] permits many interpretations, and those who promote it are still struggling to formulate an authoritative and consensual definition" (Suhrke 1999, 370-372) and said succinctly by Paris, "The content of human security is really in the eye of the beholder" (Paris 2004, 270-273). For his part, Andrew Mack asserts with great clarity:

Figure 1:

Delineated and Insinuated Human Security Threats in Africa

- Natural Disasters
- Food Security
- Piracy
- Resource Plundering
- Human Smuggling
- Crime
- Money Laundering
- Global Warming
- Third World Debt
- Unprosecuted War Criminals
- Declining and Insufficient Development Aid
- Bad Advice from Donors
- Aid Conditionalities
- Child Soldiering
- Illiteracy
- Malnutrition
- Inequality
- Landmines
- Toxic Waste
- Militarization
- Weak Constitutions
- Neglect of Resource Endowed Regions
- Africa's Involvement with the U.S.
 War on Terror
- Exodus of Africa's Intellectuals
- A Brutalized Male Population
- A Military Culture
- Poorly Trained and Ill Fed Armies
- Unsuccessful Demobilizations
- Trafficking in Oil, Cigarettes, and Fake Medicines
- The Exploitative Rapport Between Tourists and Sex Workers
- Canadian Investments in Sudanese Pipelines

(African Union 2004, Article 6; Badaru 2010, 21-42; Papastavridis 2010 122 - 154; Douma 2007, 116; African Union 2010; Akokpari 2008, 74 - 70; Bomani 1996; Tickner 2001, 42; Alao 2010, 104 - 108; Akokpari 2008; Harker 2002, Brittain and Conchiglia 2006, 71-86; Redfern 2010; O'Manique 2006, 169).

If the term "insecurity" embraces almost all forms of harm to individuals – from affronts to dignity to genocide – it loses any real descriptive power. Any definition that conflates dependent and independent variables renders causal analysis virtually impossible. A concept that aspires to explain everything in reality explains nothing (Tadjabkhsh and Chenoy 2007, 45).

Indeed, if we are to take King and Murray's definition that human security is "freedom from care, anxiety or apprehension," it would be doubtful that any individual on the face of the earth could be said to be a secure human (King and Murray 2001). "At a certain point, human security becomes a loose synonym for 'bad things that can happen," writes Krause (Krause 2004, 44).

Framed as such, the human security paradigm can be seen as a postmodern, poststructuralist way of thinking about security and consequently, the same critiques levelled at postmodernist paradigms are readily applicable here. Security, writ blurry, can encompass anything. Indeed, despite admirably endeavoring to broaden the security studies discourse to put human beings and not states at the forefront, the human security paradigm nevertheless succumbs to what Henry Louis Gates Jr. beautifully describes as "the postmodernist urge to exalt indeterminacy" (Gates 2010, 48-49). What has given rise to this exaltation of indeterminacy within the human security literature? This essay next argues that at the root of the problem is human security's latent and largely unquestioned "double jump."

Human Security's Dirty Little Secret: The "Double Jump"

The "double jump," this essay argues, is a feature that has accompanied the inauguration of the human security paradigm that has largely been uncritically accepted, and which is at the core of the paradigm's current problematic employment as described above. In essence, the double jump is the two-pronged shift that human security has taken from traditional security studies approaches, when what is frequently cited is only one shift. The first of these shifts, which is well noted in the literature, is the mutation of focus from the state to the individual as the primary referent for security concerns. Human security focuses on the security of the individual rather than the security of the state. This shift can be thought of as human security's "single jump." The second jump, which appears to have been uncritically (and unwittingly) accepted, is the shift from the focus of *violent threats* against the object (the state or the individual) to the admissibility of concern about *any threat* (violent or non-violent) against the object. Thus, while the human security agenda purports to change the notion of security in one way, in reality, it alters it in two.

At its core, I suggest, the double jump may be said to have remained prevalent in the human security literature thanks to a historical non-questioning of the ontological and epistemological issues surrounding what does or does not constitute a human security threat. Indeed, as Newman has correctly pointed out, within the academic literature, proponents of human security most typically

do not engage in epistemological, ontological, or methodological debates; indeed, much human security work is seemingly ignorant of these debates, or finds them unnecessary. Human security generally adopts a policy-oriented approach, which attempts to improve human welfare within the political, legal, and practical parameters of the 'real world' (Newman 17).

Figure 2: Shifts in Human Security: Traditional, Single Jump, and Double Jumps

	State Institutions	Non-State Institutions (Individuals and Communities)
Threats of Violence	Traditional Security Approaches	Human Security's Recognized "Single Jump"
Any Threats		HumanSecurity's Unrecognized"Double Jump"

At the ontological level, the unrestricted breadth of normative theorizing (explicitly allowed and venerated by the term's postmodern adherents), has trickled into the policymaking realm, therefore allowing any real world social issue to be labelled as a human security threat. Put otherwise, normative and positivist applications have bled into another, but in a one-sided way. The postmodern normative says that anything in the positivist realm can qualify as a human security threat, yet the unbounded nature of the positivist has yet to make any restrictions on the term's normative development.

An example of the glossing over of human security's double jump can be neatly seen in an excerpt from an otherwise admirable chapter on human security in Africa by Colleen O'Manique, who writes

The conception of human security...places the individual at the center of conceptions of security, proposing instead an 'emancipatory critical security' which would free people and communities from the social, physical, economic, and political constraints that prevent them from carrying out what they would freely choose to do. The essence of human security is the absence of violence, whether sexual, military, environmental or economic (O'Manique 2006, 174).

O'Manique here makes the "double jump" with her first statement (which focuses on *individuals*' freedom from *any threat*) yet then reverts to the "single jump" (which states that the essence of human security focuses on *individuals*' protection from *violent threats*) in her second statement. In consecutive sentences, she highlights a common trend of passing over as unimportant the difference between the two jumps. Put simply, human security has changed the landscape of security studies in more ways than it professes, or perhaps, even recognizes.

How then does the shift from consideration of *violence* to the consideration of *any threat* change the way we think about security? The answer, I think, relates to the range of conditions of desirability and undesirability that surround each threat. Violence, when perpetrated against an object – whether a state or a human being – is, except in the most isolated occasions, unwelcome. It is rarely (if ever) invited, and the positive outcomes as a result of it are virtually none. Violence, as an act committed against either a

state or an individual, is therefore a *universal and clear-cut negative* occurrence. The same unequivocal negative distinctions cannot be claimed when investigating the new range of phenomena that have been labeled as threats by the human security paradigm. Unlike violence, value judgments about other social occurrences (the new "threats") are rarely so straightforward. So while it is indeed quite rational to classify some phenomena such as "malnutrition" or "abject poverty" as universally undesirable as "violence," others, such as the "neglect of resource-endowed regions" or "declining development aid" can indeed have a myriad of both negative *and positive* impacts on societies. Yet once a process or occurrence is distinguished as a threat to human security, attention to the nuances of impacts is summarily overlooked. In short, the ways that societies are impacted by phenomena are not entirely negative or entirely positive. By relying on the human security paradigm, social processes are seen as either exclusively black or white, and not for the shades of gray that actually color all social realities.

For now, what this essays seeks to demonstrate is how the double jump has led yet another social process, the introduction of electronic waste into Ghana, to be classified as a human security threat, when in fact certain members of Ghanaian society do benefit from it. To do so, the next section shows how there are in fact innumerable benefits to the electronic waste trade that can actually improve human wellbeing, many of which are consistently overlooked when the issue is examined via the exclusive lens of human security.

E-Waste in Ghana: The Underreported Benefits to Human Security

Having clarified one theoretical inconsistency plaguing the human security paradigm, the discussion now turns to an empirical examination of that blight on ground-level conditions. As elucidated at the opening of the essay, a number of observers have labeled the entrance of e-waste into Ghana as a threat to human security. In certain ways, they are unquestionably correct. Yet what has thus far gone underreported are the positive impacts that the second-hand electronics trade is having on people. Following, this essay investigates some of the less frequently recognized benefits of the second-hand electronics trade in Ghana that when swallowed in the human security literature's double jump, go undocumented.

Second-hand Electronics and Alternative Livelihoods

If it is indeed true that money makes the world go round, e-waste in Ghana has an indelible pull over the axes of the social sphere in the country, serving to underwrite a number of under-discussed economies that are having transformative impacts on people's lives. Perhaps the most readily visible way that the trade in second-hand electronics actually helps, not hinders, the prospect of human security is by providing alternative livelihoods for large swaths of Ghanaians who might otherwise be left without a source of income.

Access to capital, whatever the source, has a positive correlative relationship with the protection of human wellbeing, not least of which includes fulfilment of basic human needs such as access to food,

medicine, shelter, and clothing. So too does access to capital protect humans in other ways, for instance, by allowing children to go to school, allowing women greater independence from men, and serving as seed capital for small businesses as well as other civic and social organizations. While there exists an extensive network of e-waste's financial beneficiaries (which are detailed in the Appendix), following, this essay elucidates just four of these sectors, which are traced by following the trajectory of e-waste from its collection in the Global North, through its arrival, repurposing, and subsequent departure from Ghana.

The first social network that benefits from e-waste includes Ghanaians living in the Diaspora and their relatives in the country who receive remittances from them. While most observers of the e-waste trade tend to vilify the export of electronics from the West into Ghana (normally by anonymous and apathetic electronics companies) the reality is that e-waste is just as frequently discussed as being sent to the country by Ghanaians themselves. In Cape Coast, one second-hand electronics dealer relayed that:

My brother lives in the U.K. and he collects computers and electronics to ship to me. I have to pay the tariffs once they get to the port, but this is not so much. We talk all the time, and I tell him what he should buy: laptop computers and then desktops. Once I sell some things, I have to send my brother some money to pay for the next shipment. It is a good living. We make good money (Anonymous worker, personal communication, January 2011).

From this, the U.K.-based brother takes a percentage, which he then uses to support his extended family in Ghana as well as his nuclear family in the U.K.

This leads to the second overlooked demographic making an alternative livelihood: second-hand electronics refurbishers, salespeople, and the wide-reaching network of their dependents. The fact that an estimated 3,000 second-hand electronics shops exist in Ghana to sell at least some of these imports should alert the reader that indeed, Greenpeace is incorrect in its assumption that "virtually all used electronics entering Ghana end up in scrap yards" (Greenpeace 2008). Resale of second-hand electronics provides a source of income for even college-educated persons, many of whom describe the job as being a lucrative one. One common misconception that second-hand workers emphasized related to the question of what constitutes the "working order" of electronic imports. As has been noted, one of the primary critiques of the e-waste trade is that an estimated majority of the items that enter the country are not in working order when they arrive. This may be true, noted a shop owner on Bantama High Street in Kumasi, but:

You from the West throw away things so easily, even if they have such a slight problem. We know we can fix them and resell them. Usually, it is not so hard to do. Even if things arrive broken, we can easily fix them (Anonymous worker, personal communication, January 2011).

As a result, even "unusable" imported goods can in fact be repaired and resold, thus not automatically creating e-waste. Eric Williams is therefore correct when he notes that the U.S. House of Representatives' Bill 2595 – which would require that electronics are refurbished in the developed world before being sent to places such as Ghana – "[would make] used electronics prohibitively expensive for many, and [close] down refurbishment businesses in the developing world" (Williams 2010). Rather than being the victims of malicious dumpings, an emergent class of entrepreneurial Ghanaians is earning a sustainable livelihood by repurposing and selling the West's off cast electronics.

A third group deriving some financial benefits from the second-hand electronics trade is those working at Agbobloshie and the entire sub-economy that exists around them. To be sure, this group faces a number of occupational hazards that are in no uncertain terms undesirable, such as the environmental and public health risks described in the introduction of this essay. However, upon a more profound examination, one must question whether it is so simple to state that the negatives of the second-hand electronics industry unequivocally outweigh the positives. One example of the social and human protections there can be seen in the creation of a workers' union at Agbobloshie. An entire social hierarchy of refuse collectors exists at the site with the senior members managing a series of underlings, each of whom has a certain role to play in overseeing the affairs of the political economy of the waste site. Because of the recent Western fascination with Agbobloshie, the union has inaugurated an entrance fee to the site. On my visit, the price of entry to the site was originally stated at 200 Ghana cedis (or about \$133 U.S.), but was eventually dropped, after substantial bargaining, to 100 cedis (\$67 U.S.). These entrance fees are used for communal benefits for the workers, such as the construction of plumbed restrooms. Additionally, leaders told of how they levy minor taxes – about 5 cedis (\$3.33 U.S.) per month from each of the workers. The money is used for protection of the entire group: if one dismantler is accused of buying and dismantling stolen goods, for instance, the group will pool the money to protect that person in the event of a fine, so that he and his family do not suffer. This example shows the creation of ground level human security protective nets that a superficial examination of macro-process of e-waste summarily overlooks.

Other actors at Agbobloshie benefit; a series of third-hand refurbishers and sellers exist, a rare few selling goods that look to be of comparable quality to those sold in actual second-hand stores. One such vendor was impressively selling what appeared to be a brand new 32" television for 400 cedis (\$266 U.S.). Added to these sellers are the market women, selling food and sachets of water to nourish the workers, the profits of which feed them and their families nightly. Further, members of workers' families (who most typically hail from the poorer, northern region of the country) are also the recipients of remittances from the sale of e-waste.

A fourth demographic benefiting economically from the second-hand electronics trade is a growing class of Ghanaian entrepreneurs dealing in unusable second-hand electronics. An example of one such business is the City Waste Recyclers Limited, a joint venture run by a Ghanaian and a German located in Accra, which collects unusable electronics and metals, hires local workers to dismantle them in a safe and environmentally friendly way, and then sells them to scrap metal importers around the world. One of the owners said, "Because world oil prices are at an all-time high, companies are excited to import recycled materials." Having collected materials – the company sets a five cedi (\$3.33 U.S.) limit on any computers purchased, and accepts donations from the international donor community, including a satellite dish from the German embassy – for more than one year, the owners were optimistic that they would soon be able to send the shipping container to an importer in China, who they estimated would pay them some 500,000 euros for the salvaged scrap metal (Issah Nikabs, personal communication, January 2011).

Secondhand Electronics: Bridging the Digital Divide

Another demographic of Ghanaian society whose well-being is actually more profoundly secured than threatened by the entrance of second-hand electronics is the growing number of Internet users in the

country. Although citizens of sub-Saharan Africa are responsible for only 4% of global Internet traffic, their connectivity is amongst the fastest growing in the world: from 2000 to 2008, the number of Internet users from the continent increased by 1000% while during the same period, Internet traffic from the rest of the world increased by only 280% (Fair et al. 2009, 29). The influx of second-hand electronic goods into Ghana is playing no small part in helping to bridge the digital divide in the country.

One sector benefiting from the digitization efforts aided by the introduction of second-hand electronics is Ghanaian schools. Though exact figures on the prevalence of internet-connected computers are not readily available, the broad consensus among educators is that historically within schools in the country, "access to ICTs [Internet and Computer Technologies]...remains highly inadequate and unevenly distributed through Ghana, with an urban bias" (Mangesi 2007, 8). Nevertheless, the value of digitization in the pedagogical environment has been much discussed, as it is increasingly apparent that a computer literate population is imperative for national competitiveness in the future global political economy. To this end, Obed Mfum-Mensah writes that education policymakers in Ghana have, "hailed the introduction of Information and Communication Technology.... as a remarkable step," capable of contributing to "knowledge production, communication and information sharing" within Ghanaian schools (Mfum-Mensah 2003, 40). Indeed, as Jensen at al. note, the cost of electronics is one of the primary issues underwriting the digital chasm, yet the "digital divide may be narrowing as the costs of the technology decline" (Jensen et al. 2007, 42). One wonders then how the gap between urban and rural schools in Ghana might be exacerbated even further if the trade in second-hand electronics ceased to exist. Only through an ever more profound harnessing of these affordable and reparable second-hand electronics might this gap eventually be closed.

Apart from schools, businesses in Ghana are heavily reliant on the influx of second-hand electronics. Internet connectivity has become an imperative for a far-reaching network of Ghanaian entrepreneurs including "mechanics, petty traders, caterers, artisans, electricians, painters, photographers, and videographers who often depend on Internet cafés to conduct transactions with customers" (Opoku-Dappah 2009). Other anonymous members of the Ghanaian civil service have mentioned that even national ministries depend on second-hand computers to conduct their day-to-day operations (Anonymous personal communication, January 2011). Indisputably most dependent, however, are Internet cafés themselves. With an estimated 1,000 Internet cafés currently operating in Ghana, they are increasingly becoming a cornerstone of Ghanaian society (Opoku-Dappah 2009), for as Fair et al. note:

Few Ghanaians can afford [new] personal computers and dialup Internet at home. Consequently more than half of all Internet users go online exclusively in public Internet cafés. 90 percent of such cafés are located in Ghana's largest cities, with more than 100 operating in Accra alone (Fair et al. 2009).

Those working in Ghanaian Internet cafés filled with second-hand computers are assumed by the Department of Labor to number more than 2,000 while it is estimated that Internet café-related work (for example, retrofitting storefronts) has employed an average of 6,000 to 7,000 Ghanaians since 1995 (Opoku-Dappah 2009). Moreover, Ghanaian Internet cafés frequently play double roles, serving not just as places to use computers, but also as venues such as bookstores, convenience stores or operating in conjunction with barbershops or salons. More to the point, those working directly in Internet cafés gain a broad variety of technical skills, including computer and financial literacy and business management

experience that are transferable to other sectors of the emergent Ghanaian business and communications class (Opoku-Dappah 2009).

Secondhand Electronics, Civil Society, and the Internet

A final demographic of Ghanaian society that is benefiting from the introduction of second-hand electronics is civil society writ large. The cultivation of a vibrant and vocal civil society is deeply connected to access to communication technology, particularly the Internet. Due to the fractured and generally anemic nature of Africa's civil societies (see for instance, Nyang'oro 2000), some "cyberoptimists" hold the opinion that online associations have the possibility of compelling political participation from citizens who would otherwise be disengaged with political processes (Jensen et al. 2007, 41). One must agree with Till Kötter that a strong civil society is actually a formidable guarantor of human security itself, for it can "help close the gap" between human security as directed from above and specific ground-level realities by

Provid[ing] social safety nets and limited protection against physical and psychological harm. Furthermore, [civil society] can play a crucial role in conflict prevention through early warning systems, monitoring information channels, and [serving as] information channels to states and international organizations (Kötter 2007, 53).

Apart from these benefits to human security provided by the Internet, one's gaze need not stray far to see the praxis of Internet use in articulating civil society's demands (frequently in relation to the developmental questions of interest to human security) to the states in which they live. Perhaps the earliest example of civil society harnessing the powers of the Internet was in Iranian civil society's discontent after incumbent President Mahmoud Ahmadinejad presumably stole the presidential election in that country in 2009, which resulted in what one commentator has referred to as the 'Twitter Revolution' (Morozov 2009). Moreover, the Arab Spring revolutions in 2011 against autocratic governments in the Middle East - from Tunisia to Egypt, Libya to Yemen - have shown that Internet access has profound effects on helping civil societies throughout the Global South not only voice their mutual qualms about the status of their wellbeing, but also to facilitate the logistical mobilization needed to act upon those nodes of dissent. These Middle East events served as the kindling that ignited Internet-based protests from African civil societies, like those that took place in Cameroon and Angola (Wallah 2011; Angola Police Jail 20, 2011). That civil society in Ghana might be considered both more vibrant and less disaffected by the domestic political conditions than its global counterparts does not overlook the fact that "by facilitating popular participation in the discussion of national or local issues" Internet access has aided civil society in "the institutionalization of democracy in Ghana" (Opoku-Dappah 2009, 21).

Conclusion

Two main critiques of the human security paradigm come to the fore in light of the preceding discussion. The first is that in its current incarnation, the human security paradigm suffers from what this essay has labelled an overly ambitious "double jump": a move from the traditional focus on *violence* against the

state, to a focus on any threat, not just of violence, against individuals and communities. This double jump has resulted in this essay's second critique, which is that because of this un-nuanced definition, the labelling of a social process as a human security threat neatly obscures the sometimes beneficial social outcomes that these same processes can engender.

The first critique offered by this essay is that of the human security paradigm in general: namely the recognition of the existence of the unconsidered "double jump." That the paradigm has sought to eschew the veneration of the state as the prime referent for security analysis is to be lauded. But while turning to the human, it has broadened the scope of security such that it encapsulates issues such as the environment, illiteracy, corruption, public health, and others, that, while having a negative impact on *human well-being* do not necessarily render citizens more susceptible to becoming objects of *violence*. This over-reaching of the human security paradigm is not simply less intellectually rigorous than one might hope. More importantly, its current incarnation serves to muddle rather than clarify discussions about how to genuinely improve the assurance of human well-being in some of the most chronically insecure locations in the world. Indeed, if the employment of the human security paradigm is to bridge the daunting gap between normative academic theorizing and positivist policy application, its adherents owe it sufficient intellectual attention to sort out such lingering issues as this.

This conclusion brings to light the second critique, which is that the "double jump" serves to obscure the oftentimes-beneficial sides to processes that are otherwise prodded into the "human security threat" corral. It should be stated clearly: the introduction of electronic e-waste to Ghana is having a variety of negative impacts on individuals and communities. This is beyond dispute. But, the process must absolutely not be viewed as wholly negative, as pigeonholing wide-reaching social phenomena does a disservice not only to those whose livelihoods and education depend on the trade, but also, to the larger intellectual enterprise of abetting the genuine assurance of human prosperity and security. As the case of electronic waste in Ghana demonstrates, for the term "human security" to be analytically useful, those employing it are in need of adding nuance to its definition. Deciphering the exact modalities of doing so is the work of the field's future scholars.

In nearing a conclusion, the impulse might exist for a reader to ask for a tally-sheet of sorts on the overall effect of e-waste in Ghana. Given that it has benefits and drawbacks, one might ask, does one outweigh the other? What is its ultimate impact on the security situation in Ghana? But to ask such questions misses the essential point of the discussion. E-waste is neither wholly bad nor fully good, and to make a totalizing normative judgment about a phenomenon that clearly has such a variety of impacts on society is to fall back into the same trap into which the human security paradigm has long lingered, to its detriment. Nevertheless, despite the argument for a lens of nuance forwarded here, the flow of second-hand electronics into the developing world will most likely continue to have a negative connotation into near future. Whether that assessment is ultimately accurate is up for debate.

What this essay has hopefully illuminated is that despite assumptions from outside, solutions to certain developmental dilemmas in Ghana are today coming in unassuming forms. From a Western perspective, the entrance of second-hand electronics is nearly universally decried. Yet closer examination of the phenomenon reveals the ways people are re-appropriating technology and making livelihoods out of what others are unilaterally declaring a process to be stopped. The outcome of all of this is that certain social

phenomena have come to gain the distinction as human security threats, as if there is only one side to the story. But this, of course, is a jump in the wrong direction.

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Appendix:

Financial Beneficiaries of Secondhand Electronics Flows

Ghanaian Diasporans and U.S./European/Asian Nationals

Collecting Secondhand Electronics

(Businesses or individuals that cull appliances for international resale in wealthier countries; some of these are nationals of these countries while others are Ghanaian nationals living in these countries)

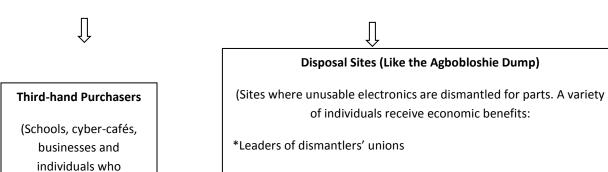


Ghanaian Purchasers



Secondhand Electronics Stores in Ghana

(Sites that sell useable electronics bought from Ghanaian Purchasers to individuals, cyber-cafés, businesses, or schools, who then "generate" the country's e-waste by dumping the electronics that they cannot sell)



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purchase secondhand goods for further use)

*Tour guides

*"Big Man" sellers (experienced sellers dealing in expensive goods like computers and televisions)

*Mid-level dismantlers (regular dismantlers)

*Female food vendors onsite



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Ghanaian Reprocessing Plants

(Located in Tema)

Private Exporters/ Entrepreneurs

(Such as City Waste Recyclers Ltd.)



International Scrap Importers

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